COMMISSION DECISION

of xxxxx

establishing the ecological criteria for the award of the EU Ecolabel for textile products

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel¹, and in particular Article 8(2) thereof,

After consulting the European Union Eco-labelling Board,

Whereas:

(1) Preamble to be completed



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HAS ADOPTED THIS DECISION:

Article 1

Product scope

- 1. The product group "textile products" shall comprise:
 - a) Textile clothing and accessories: Clothing (such as tops, underwear, nightwear, hosiery, bottoms, jackets, dresses, suits, sports and swimwear and gloves) and accessories (including ties, handkerchiefs, shawls, scarves and bags) consisting of at least 80% by weight of textile fibres in a woven, non-woven or knitted form;
 - b) Interior textiles: Textile products for interior use (such as curtains, bed linen, table linen, towels, blankets, throws, mats and rugs) consisting of at least 80% by weight of textile fibres in a woven, non-woven or knitted form.
 - c) Fibres, yarn, fabric and knitted panels: Intended for use in textile clothing and accessories and interior textiles, including upholstery fabric and mattress ticking prior to the application of backings and treatments associated with the final product.
- For 'textile clothing and fabric accessories' and for 'interior textiles' fillings, padding, membranes and coatings made of fibres addressed within the scope of this decision need not be taken into account in the calculation of the percentage of textile fibres.
- 3. The following non-fibre elements of a textile product are addressed by criteria within this document:
 - Zips, buttons and other accessories
 - Membranes, coatings and laminates
- 4. Filling materials that are not made from textile fibres should still comply with restrictions listed in Criterion 11 that relate to auxiliaries, surfactants, biocides and formaldehyde.
- 5. The following products are not covered by these criteria: Single use products

Cleaning products

Wall and floor coverings (Please see the EU Commission Decision 2009/967/EC for textile floor coverings)

Fabrics that form part of structures intended for use outdoors (such as banners and tents)

- 6. Garments, fabrics and fibres that contain the following are excluded by these criteria:
 - Electrical devices or which form an integral part of electrical circuitry
 - Devices or impregnated substances designed to sense or react to changes in ambient conditions

Article 2

For the purpose of this Decision, the following definitions shall apply:

- (1) Auxilliaries
- (2) Composite sampling Cut/make/trim
- (3) Dyes
- (4) Dyeing
- (5) Fabric formation
- (6) Fabric softeners
- (7) Finishing
- (8) Flame retardants
- (9) Inherently biodegradable
- (10) Organic compounds
- (11) Non-biodegradable
- (12) Readily biodegradable
- (13) Optical brighteners
- (14) Pigments
- (15) Pre-treatment
- (16) Printing
- (17) Spinning
- (18) VOC's

(19) Water, dirt and stain repellents

Article x

Miscellaneous articles to be added

ANNEX

EU ECOLABEL CRITERIA

The aims of the criteria

The criteria aim in particular at identifying products that have a lower environmental impact along their life cycle, with specific improvements so that they are:

- sourced from more sustainable forms of agriculture and forestry,
- manufactured using resources and energy more efficiently,
- manufactured using cleaner, less polluting processes
- manufactured using less hazardous substances,
- designed and specified to be high quality and durable,

Criteria for awarding the EU Ecolabel to textiles are set for the following aspects:

Textile fibres,

- 1. Cotton and other natural cellulosic seed fibres
- 2. Flax and other bast fibres
- 3. Wool and other keratin fibres
- 4. Acrylic
- 5. Elastane
- 6. Polyamide
- 7. Polyester
- 8. Polypropylene
- 9. Man-made cellulose fibres (Acetate, cupro, lyocell, modal and viscose)

Components and accessories,

- 10. Fillings
- 11. Coatings, laminates and membranes
- 12. Accessories

Chemicals and processes,

- 13. Restricted Substance List (RSL)
- 14. Substitution of hazardous substances in dyeing, printing and finishing
- 15. Washing, drying and curing energy efficiency
- 16. Treatment of emissions to air and water

Fitness for use.

- 17. Dimensional changes during washing and drying
- 18. Colour fastness to washing
- 19. Colour fastness to perspiration (acid, alkaline)
- 20. Colour fastness to wet rubbing
- 21. Colour fastness to dry rubbing
- 22. Colour fastness to light
- 23. Fabric resistance to pilling and abrasion
- 24. Durability of function

Corporate Social Responsibility

- 25. International Labour Organisation (ILO) Core Labour Standards
- 26. Restriction on the sandblasting of denim

Assessment and verification

In order to show compliance with the criteria the applicant is required to declare the following information about the product(s) and their supply chain:

- (a) The complete material composition of the product(s), identifying and showing compliance for textile fibres, components and accessories;
- Source of verification: Fibre and component manufacturers and their raw material and chemical suppliers
- (b) The substances, production recipes and technologies used to manufacture and impart specific qualities and functions to the product at the spinning, pre-treatment, dyeing, printing and finishing stages and to treat air and wastewater emissions; *Source of verification*: Production sites and their chemical suppliers
- (c) The fitness for use of the product(s) as defined by specific testing procedures which address colour fastness under specific conditions, resistance to pilling and abrasion, and the durability of repellency, easycare and flame retardancy functions; *Source of verification*: Testing laboratories
- (d) The Corporate Social Responsibility demonstrated by the applicants' selected cut/make/trim suppliers, as defined by specific ILO conventions.

Source of verification: Cut/make/trim production sites

Each criteria contains detailed verification requirements which may require the applicant to compile declarations, documentation, analyses, test reports and other evidence relating to the product(s) and their supply chain.

Where appropriate, test methods other than those indicated for each criterion may be used if their equivalence is accepted by the Competent Body assessing the application. If available, the testing shall be performed by laboratories that meet the general requirements of European Standard EN ISO 17025 ² or equivalent.

The functional unit, to which inputs and outputs should be related, is 1 kg of textile product at normal conditions (65 % RH \pm 4 % and 20 °C \pm 2 °C; these norm conditions are specified in ISO 139 Textiles — standard atmospheres for conditioning and testing).

Where the applicant uses a certification system to provide third party verifications the chosen system and associated systems for accreditation of verifiers should reflect as far as possible the guidance in EN 45011 and ISO 17065. Where appropriate, Competent Bodies may require supporting documentation and may carry out independent verifications and site visits.

The Competent Bodies are recommended to take into account the implementation of recognised environmental management schemes, such as EMAS, ISO 14001 and ISO 50001, when assessing applications and monitoring compliance with the criteria (*note*: it is not required to implement such management schemes).

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² ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories

ECOLOGICAL CRITERIA

Applicants must demonstrate the compliance with the criteria AS relevant to the material composition, chemical formulations, production sites and fitness for use of products they wish to carry the Ecolabel.

TEXTILE FIBRE CRITERIA

Fibre-specific criteria are set out in this section for the following fibre types:

- (a) Natural fibres: Cotton and other natural cellulosic seed fibres, flax and other bast fibres, wool and other keratin fibres;
- (b) Synthetic fibres: Acrylic, elastane, polyamide, polyester and polypropylene;
- (c) Man-made cellulose fibres: Acetate, cupro, lyocell, modal and viscose.

The criteria for a given fibre-type need not be met if a fibre contributes to less than 5% of the total weight of the product or if they constitute padding. With the exception of polyamide and polyester these criteria do not have to be met:

- a) By the whole product if it contains fibres that contain recycled content constituting at least 70% by weight of all fibres in the product, or
- b) By individual fibres forming part of the ecolabelled product which contain at least 70% by weight of recycled content.

In this context, fibres that contain a recycled content are defined as fibres originating from pre-consumer waste (including polymer and fibre production waste, cuttings from textile and clothing manufacturers) and post-consumer waste (textile and all kind of fibre and textile products, as well as non-textile waste including PET drinking bottles and fishing nets).

1. Cotton and other natural cellulosic seed fibres (including kapok)

A minimum of 50% of the cotton and other natural cellulosic seed fibres (hereafter referred to as cotton) used in the final product shall be grown using one or a combination of the following three production standards:

- (a) Cotton grown without the use of restricted pesticides
- (b) Cotton grown according to IPM principles
- (c) Cotton grown according to Organic standards

All cotton verified to meet these production standards shall also meet a common traceability requirement.

(a) Production option 1: Cotton grown without the use of restricted pesticides

Cotton shall be grown without the use of any of the following substances:

Alachlor, aldicarb, aldrin, campheclor (toxaphene), captafol, chlordane, 2,4,5-T, chlordimeform, chlorobenzilate, cypermethrin, DDT, dieldrin, dinoseb and its salts, endosulfan, endrin, glyphosulfate, heptachlor, hexachlorobenzene, hexachlorocyclohexane (total isomers), methamidophos, methyl-o-dematon, methylparathion, monocrotophos, neonicotinoids (chlothianidine, imidacloprid, thiametoxam) parathion, phosphamidon, pentachlorophenol, thiofanex, triafanex, triazophos

Cotton shall not contain more than 0.5 ppm in total (sensitivity of the test method permitting) of the substances listed above.

Assessment and verification: Declarations of non-use shall be obtained from farmers and/or farmer producer groups to be verified by annual site visits carried out by control bodies accredited by either national governments or recognised organic or IPM certification schemes.

Additionally cotton shall be tested for the listed substances. A test report shall be provided based on the following test methods, as appropriate:

- US EPA 8081 B (organo-chlorine pesticides, with ultrasonic or Soxhlet extraction and apolar solvents (iso-octane or hexane)),
- US EPA 8151 A (chlorinated herbicides, using methanol),
- US EPA 8141 B (organophosphorus compounds),
- US EPA 8270 D (semi-volatile organic compounds).

Tests should be made on samples of raw cotton from each country of origin and before it passes through any wet treatment. For each country of origin testing shall be carried out on the following basis:

- where only one lot of cotton is used per year a sample shall be taken from a randomly selected bale,
- if more than two lots of cotton are used per year composite samples shall be taken from 5% of the bales

(b) Production option 2: Cotton grown according to IPM principles

Cotton shall be grown according to Integrated Pest Management (IPM) principles as defined by the UN FAO's IPM programme.

Assessment and verification: The applicant shall provide evidence that the cotton has been grown by farmers that have participated in Government IPM programmes or participate in third party certified IPM schemes. Verification shall either be provided on an annual basis for each country of origin or on the basis of certifications for all cotton bales.

Government programmes accepted shall include the USDA IPM programme, the Australian Better Management Programme (BMP) and all programmes endorsed by the UN FAO. Certification to the following IPM schemes shall be accepted – the Better Cotton Initiative (BCI), Cotton Made in Africa and Fair Trade.

(c) Production standard option 3: Organic

Cotton shall be grown according to the requirements laid down in Regulation (EC) No 834/2007 ³ or the US National Organic Programme (NOP). The organic cotton content may include organically grown cotton and transitional organic cotton.

Assessment and verification: Organic content should be certified by an independent control body to have been produced in conformity with the production and inspection requirements laid down in Regulation 834/2007/EC or the US National Organic Programme (NOP). Verification shall either be provided on an annual basis for each country of origin.

(d) Common requirement: traceability of greige cotton

All cotton grown according to the three production standards described in this criteria and which are used to manufacture an Ecolabelled textile product shall be traceable from the point of verification of the production standard up until, as a minimum, greige fabric production.

Assessment and verification: The applicant shall demonstrate compliance with the minimum cotton content requirement either for the annual volume of cotton purchased or for the blend of cotton used to manufacture the final product(s):

- (i) On an annualised basis: Transaction records and/or invoices shall be provided that document the quantity of cotton purchased on an annual basis from farmers or producer groups, and/or the total weight of certified bales, up until greige fabric production.
- (ii) On a final product basis: Documentation shall be provided from the spinning and/or fabric production stages. . All documentation shall reference the Control Body or certifier of the different forms of cotton.

³ European Parliament and the Council of the European Union, Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91, Office Journal of the European Union, 20th July 2007

Cotton certified to the GOTS, Fair Trade, OE Blended and OE 100 standards, as well as equivalent content claim or traceability standards shall be accepted as complying with these requirements.

2. Flax and other bast fibres (including hemp, jute and ramie)

(a) Flax and other bast fibres should be retted in ambient conditions without thermal energy inputs.

Assessment and verification: The applicant shall provide a declaration by the farmers and/or scutching mills supplying the fibre of the retting method used.

(b) Where water retting has been used the wastewater-from retting ponds shall be treated so as to reduce the COD or TOC by at least 75% for hemp fibres and by at least 95% for flax and other bast fibres.

Assessment and verification: If water retting is used, the applicant shall provide a test report showing compliance and using the following test method: ISO 6060 (COD).

3. Wool and other keratin fibres (including wool from sheep and lambs, and hair from camel, alpaca and goat)

(a) The following sum totals shall not be exceeded for wool ectoparasiticide concentrations on raw wool prior to scouring.

Ectoparasiticide groups	Sum total limit value
γ -hexachlorocyclohexane (lindane), α -hexachlorocyclohexane, β -hexachlorocyclohexane, δ -hexachlorocyclohexane, aldrin, dieldrin, endrin, p,p'-DDT, p,p'-DDD	0.5 ppm
Cypermethrin, deltamethrin, fenvalerate, cyhalothrin, flumethrin	0.5 ppm
Diazinon, malathion, propetamphos, chlorfenvinphos, dichlofenthion, chlorpyriphos, fenchlorphos	2 ppm
Diflubenzuron, triflumuron, dicyclanil	2 ppm

These requirements do not apply if documentary evidence can be presented that establishes the identity of the farmers producing at least 75 % of the wool or keratin fibres in question, together with a third party verification based on site visits that the substances listed above have not been applied to the fields or animals concerned.

Assessment and verification: The applicant shall either provide the documentation indicated above or compile test reports, using the following test method: IWTO Draft Test Method 59. The test should be made on sales lots of raw wool, by country of origin (if mixed) and before any wet processing. A minimum of one composite sample of multiple lots from each country of origin shall be tested per processing lot. A composite sample should consist of:

- Wool fibres from at least 10 randomly selected farmer lots within the sales lot;
- or one composite sample per farmer supplying the lots where there are less than 10 sales lots within the processing lot.

Alternatively residue test certificates may be submitted for all sales lots in a processing lot.

(b) Wool scouring operations shall minimise effluent COD by maximising dirt removal and grease recovery, followed by treatment to secondary standards either on or off site. The following COD limits shall apply to coarse and fine greasy wool scouring. Fine wool is defined as merino wool of ≤24.5 micron in diameter.

Type of wool	Final discharge to the environment (g COD/kg greasy wool)
Coarse wool	25 g/kg
Fine wool	45 g/kg

Assessment and verification: The applicant shall provide relevant data and test reports related to this criterion, using the following test method: ISO 6060.

- (c) Wool scourers shall implement at least one of the following measures to recoveroxidised grease, fibre, suint or sludge:
 - (i) recovery for sale as a chemical feedstock
 - (ii) the production of compost or liquid fertiliser,
 - (iii) the manufacturing of products such as building materials,
 - (iv) treatment and energy recovery by anaerobic digestion or incineration.

Assessment and verification: The applicant shall provide reports and waste transfer notes confirming the type and quantity of waste recovered and the recovery method used.

4. Acrylic

(a) The emissions to air of acrylonitrile (during polymerisation and up to the solution ready for spinning), expressed as an annual average, shall be less than 1 g/kg of fibre produced.

Assessment and verification: The applicant shall provide detailed documentation and/or test reports showing compliance with this criterion, together with a declaration of compliance from the fibre manufacturer(s).

1.2 The workplace emissions to air of N,N-dimethylacetamide (127-19-5) during polymerisation and spinning shall not exceed an Occupational Exposure Limit Value (IOELV) of 10.0 ppm.

Assessment and verification: Limit values are to be measured at those process stages in which the substances are used, expressed as an 8-hour average value (shift mean value). The applicant shall provide test reports and monitoring data from the fibre manufacturer(s) showing compliance with this criterion.

5. Elastane

(a) Organotin compounds shall not be used to manufacture the fibres.

Assessment and verification: The applicant shall provide a declaration of non-use from the fibre manufacturer(s).

- (b) The workplace emissions to air of the following substances during polymerisation and spinning shall not exceed the following Indicative Occupational Exposure Limit Values (IOELV):
 - diphenylmethane-4,4'-diisocyanate (101-68-8) 0.005 ppm
 - toluene-2,4-diisocyanate (584-84-9) 0.005 ppm
 - N,N-dimethylacetamide (127-19-5) 10.0 ppm

Assessment and verification: Limit values are to be measured at those process stages in which the substances are used, expressed as an 8-hour average value (shift mean value). The applicant shall provide test reports and monitoring data from the fibre manufacturer(s) showing compliance with this criterion.

6. Polyamide (or nylon)

Applicants shall meet the requirements of at least one of the production standards listed in sub-criteria (a) and (b).

(a) Production standard 1: Low N_2O emission feedstock.

The emissions to air of N_2O from production of the adipic acid used as feedstock for polyamide production, expressed as an annual average, shall not exceed $\frac{18}{9}$ g N_2O /kg adipic acid.

Assessment and verification: The applicant shall provide documentation and/or test reports showing compliance of the fibres used with this criterion, together with a declaration of compliance from fibre manufacturer(s) and their feedstock providers.

(b) Production standard 2: Minimum recycled content.

Fibres shall be manufactured using a minimum content of 20% nylon that has been recycled from pre and/or post-consumer waste.

Assessment and verification: Recycled content shall be traceable back to the reprocessing of the feedstock. This shall be verified by independent third party certification of the chain of custody or by documentation provided by suppliers and processors.

7. Polyester

Applicants for consumer textile products shall comply with sub-criteria (a) and (b) whilst commercial and public sector textile products applicants shall comply with (a) and *either* (b) or (c).

(a) The level of antimony present in the polyester fibres shall not exceed 260 ppm. Polyester fibres manufactured from recycled PET bottles are derogated from this requirement.

Assessment and verification: The applicant shall either provide a declaration of non-use or a test report using the following test method: direct determination by Atomic Absorption Spectrometry or ICP (Inductively Coupled Plasma) Mass Spectrometry. The test shall be carried out on a composite sample of raw fibres prior to any wet processing.

(b) Fibres shall be manufactured using a minimum content of PET that has been recycled from pre-consumer and/or post-consumer waste. Staple fibres shall contain a minimum content of 50% and filament fibres 20%. Micro-fibres are derogated from this requirement and shall instead comply with (c).

Assessment and verification: Recycled content shall be traceable back to the reprocessing of the feedstock. This shall be verified by independent third party certification of the chain of custody or by documentation provided by suppliers and processors.

(c) The emissions of VOCs during the production of polyester, expressed as an annual average and including fugitive emissions as well, shall not exceed 1.2 g/kg for PET chips and 10.3 g/kg for filament fibre.

Assessment and verification: The applicant shall provide detailed documentation and/or test reports showing compliance with this criterion, together with a declaration of compliance.

8. Polypropylene

(a) Lead based pigments shall not be used.

Assessment and verification: The applicant shall provide a declaration of non-use.

9. Man-made cellulose fibres (including viscose, modal, lyocell and cupro)

Pulp production sub-criteria

(a) A minimum of 25% pulp fibres shall be manufactured from wood that has been grown according to the principles of Sustainable Forestry Management as defined by the UN FAO. The remaining proportion of pulp fibres shall be from pulp that is sourced from legal forestry and plantations.

Assessment and verification: The applicant shall obtain from the fibre manufacturer(s) valid, independently certified chain of custody certificates demonstrating that the wood fibres have been grown according to Sustainable Forestry Management principles and/or are from legal sources. FSC, PEFC and PEFC endorsed schemes shall be accepted as independent certification.

The fibre manufacturer shall demonstrate that due diligence processes have been followed as specified in Regulation (EC)19/2010 in order to ensure that timber has been legally harvested. Valid FLEGT or CITES licenses and/or third party certification shall be accepted as evidence of legal sourcing.

- (b) Pulp produced from cotton linters shall meet with the requirements of the cotton criterion, with exception that a lower minimum requirement of 25% shall apply.
- (c) Pulp used to manufacture fibres shall be bleached without the use of elemental chlorine. The resulting total amount of chlorine and organically bound chlorine in the fibres (OX) shall not exceed 150 ppm or in the wastewater (AOX) shall not exceed 100 kg/ADt pulp.

Assessment and verification: The applicant shall provide a test report showing compliance with either the OX or the AOX requirement, using the appropriate test method:

- OX: ISO 11480:1997 (controlled combustion and microcoulometry).

- AOX: ISO 9562:2004

- (d) A minimum of 50% of the pulp used to manufacture fibres shall be purchased from dissolving pulp mills that recover value from their spent process liquors either by:
 - a) Generating on-site electricity and steam
 - b) Manufacturing chemical co-products.

Assessment and verification: The applicant shall provide a list of pulp suppliers used to make the ecolabelled fibres and the proportion of pulp that they supply. Documentation and evidence shall be provided that the required proportion of suppliers have the appropriate energy generating equipment and/or co-product recovery and manufacturing systems installed at related production sites.

Fibre production sub-criteria

(e) For viscose and modal fibres, the sulphur content of the emissions of sulphur compounds to air from fibre production processes, expressed as an annual average, shall not exceed the following performance values:

Fibre type	Performance	
	value (g S/kg)	
Staple fibre	12.5 g/kg	
Filament fibre		
- Batch washing	40 g/kg	
- Integrated washing	170 g/kg	

Assessment and verification: The applicant shall provide detailed documentation and/or test reports showing compliance with this criterion, together with a declaration of compliance.

COMPONENT AND ACCESSORIES CRITERIA

The criteria in this section apply to components and accessories that form part of a final product.

10. Fillings

- (a) Filling materials consisting of textile fibres shall comply with the textile fibre criteria (1–9) where appropriate.
- (b) Filling materials shall comply with the textile Restricted Substance List's requirements for biocides and formaldehyde (see annex 1).
- (c) Detergents and other chemicals used for the washing of fillings (down, feathers, natural or synthetic fibres) shall comply with the textile Restricted Substance List's requirements for auxiliary chemicals and for detergents, fabric softeners and complexing agents (see annex 1).

Assessment and verification: As indicated in the corresponding criteria

11. Coatings, laminates and membranes

- (a) Components made of polyurethane shall comply with Textile fibre criteria 4(a) relating to organic tin and 3.2 relating to workplace exposure to aromatic diisocyanates and DMAc.
- (b) Components made of polyester shall comply with Textile fibre criteria 8(a) and 8(c) regarding antimony content and the emission of VOCs during polymerisation.

12. Accessories

Metal and plastic components such as zips, buttons and fasteners shall comply with the textile Restricted Substance List's requirements for accessories (see annex 1).

Assessment and verification: As indicated in the corresponding criteria.

CHEMICALS AND PROCESS CRITERIA

The criteria in this section apply, where specified, to the following production stages:

- (i) Spinning
- (ii) Fabric formation
- (iii) Pre-treatment
- (iv) Dyeing
- (v) Printing
- (vi) Finishing
- (vii) Cut/make/trim

Unless specified otherwise these criteria shall also apply to fibres containing recycled content.

13. Restricted Substance List (RSL)

(a) General requirements

The final product and the production recipes used to manufacture the final product shall not contain the hazardous substances listed in the Restricted Substance List (RSL) at or above the specified concentration limits. The RSL can be found in Annex 1 and 2.

The RSL shall be communicated to suppliers and agents responsible for the spinning, dyeing, printing and finishing stages of production. Verification and testing requirements are specified in the RSL for each production stage and for the final product.

Assessment and verification: The applicant shall provide a declaration of compliance with the RSL supported by evidence as applicable to the substances and production recipes used to manufacture the final product. The requirements are indicated in the RSL and include declarations obtained from those responsible for related production stages, declarations from chemical suppliers and test results from laboratory analysis of samples of the final product.

Declarations obtained from production stages shall be supported by Safety Data Sheets (SDS) for production recipes and, where necessary, declarations from chemical suppliers. Safety Data Sheets shall be completed in accordance with the guidance in Section 10, 11 and 12 of Annex II of Regulation (EC) 1907/2006 (Requirements for the Compilation of Safety Data Sheets). Incomplete Safety Data Sheets (SDS) will require supplementing by declarations from chemical suppliers.

Laboratory analysis of the final product shall be carried out for specific product lines, where specified in the RSL and according to the test methods listed. Testing, where required, shall be carried out upon application and once a year thereafter on a random basis for each product line, with results then communicated to the relevant Competent Body. Test data obtained for the purposes of compliance with industry RSL's and other textile certification schemes shall be accepted where the test methods are equivalent and have been carried out on a representative sample of the final product.

Failure of a test result during a license period shall result in retesting for the specific product line. If the second test fails then the license shall be suspended for the specific product line, remedial action consisting of an evaluation report identifying the reasons for test failure followed by achievement of a compliant test result will be required in order to re-instate the license.

(b) Substances of Very High Concern (SVHC's)

Concern

The final product including any component or accessory shall not, unless specifically derogated, contain substances that:

(i) Meet the criteria in Article 57 of Regulation (EC) No 1907/2006 and of the Council of 18th December 2006 concerning the Registration,
Evaluation, Authorisation and Restriction of Chemicals (REACH)
(ii) Have been identified according to the procedure described in Article
59(1) which establishes the Candidate List for Substances of Very High

No derogation shall be given concerning substances that meet either of these two conditions, and which are present in a textile article, or in any homogeneous part of a complex textile article, in concentrations higher than 0,1 % (weight by weight).

Assessment and verification: The applicant shall compile declarations of compliance from each production stage. Substances and recipes used at each production stage shall be screened against the latest version of the Candidate List published by ECHA. Where a derogation has been granted then the applicant shall show that use of the substance is in compliance with the concentration limits and derogation conditions set out in the RSL.

14. Substitution of hazardous substances used in dyeing, printing and finishing

Substances applied to fabrics and knitted panels during dyeing, printing and finishing processes which remain on the final product and, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council⁴ or Council Directive 67/548/EC⁵, meet the criteria for classification with the hazard classes or risk phrases listed in table 1 shall not be used unless they have been specifically derogated. These restrictions shall also apply to functional substances incorporated into man-made fibres during their manufacturing.

(a) Textile hazard class restrictions

The hazard classifications restricted by this criteria are listed in table 1. The most recent classification rules adopted by the European Union shall take precedence over the listed hazard classifications and risk phrases. Applicants shall therefore ensure that any classifications are based on the most recent classification rules.

The use of substances or mixtures which change their properties upon processing (e.g., become no longer bioavailable, undergo chemical modification) so that the identified hazard no longer applies are exempted from the above requirements. This shall include modified polymers and monomers or additives which become covalently bonded within plastic coatings.

Table 1: Restricted hazard classifications and their hazard categorisation

	Acute toxicity		
	Category 1 and 2	Category 3	
	H300 Fatal if swallowed (R28)	H301 Toxic if swallowed (R25)	
H310 Fatal in contact with skin H		H311 Toxic in contact with skin (R24)	
	(R27)		
	H330 Fatal if inhaled (R23/26)	H331 Toxic if inhaled (R23)	
H304 May be fatal if swallowed and EUH070 Toxic by eye contact (R39/		EUH070 Toxic by eye contact (R39/41)	
	enters airways (R65)		

OJ L 353, 31.12.2008, p. 1.

⁵ OJ 196, 16.8.1967, p. 1.

Specific target organ toxicity			
Category 1	Category 2		
H370 Causes damage to organs (R39/23, R39/24, R39/25, R39/26, R39/27, R39/28)	H371 May cause damage to organs (R68/20, R68/21, R68/22)		
H372 Causes damage to organs (R48/25, R48/24, R48/23)	H373 May cause damage to organs (R48/20, R48/21, R48/22)		

Respiratory and skin sensitisation		
Category 1A	Category 1B	
H317: May cause allergic skin	H317: May cause allergic skin reaction	
reaction (R43)	(R43)	
H334: May cause allergy or asthma	H334: May cause allergy or asthma	
symptoms or breathing difficulties if	symptoms or breathing difficulties if	
inhaled (R42)	inhaled (R42)	

Carcinogenic, mutagenic or toxic for reproduction		
Category 1A and 1B	Category 2	
H340 May cause genetic defects	H341 Suspected of causing genetic	
(R46)	defects (R68)	
H350 May cause cancer	H351 Suspected of causing cancer	
(R45)	(R49)	
H350i May cause cancer by		
inhalation (R49)		
H360F May damage fertility (R60)	H361f Suspected of damaging fertility	
	(R62)	
H360D May damage the unborn	H361d Suspected of damaging the	
child (R61)	unborn child (R63)	
H360FD May damage fertility. May	H361fd Suspected of damaging fertility.	
damage the unborn child (R60,	Suspected of damaging the unborn child	
R60/61)	(R62/63)	
H360Fd May damage fertility.	H362 May cause harm to breast fed	
Suspected of damaging the unborn	children (R64)	
child (R60/63)		
H360Df May damage the unborn		
child. Suspected of damaging		
fertility (R61/62)		

Hazardous to the aquatic environment		
Category 1 and 2 Category 3 and 4		
H400 Very toxic to aquatic life	H411 Toxic to aquatic life with long-	

(R50)	lasting effects (R51/53)
H410 Very toxic to aquatic life with	H412 Harmful to aquatic life with long-
long-lasting effects (R50/53)	lasting effects (R52/53)
H413 May cause long-lasting effects	H413 May cause long-lasting effects to
to aquatic life (R53) ¹	aquatic life (R53) ²
EUH059 Hazardous to the ozone	
layer (R59)	

Notes:

- 1. Where a substance that is classified with H413 is <u>both</u> non-biodegradable and bioacumulative.
- 2. Where a substance that is classified with H413 is *either* non-biodegradable or bioacumulative.

(b) Derogations that apply to textile substance groups

In accordance with Article 6(7) of Regulation (EC) No 66/2010 the substance groups in table 2 are specifically derogated from the requirements set out in Article 14(a) and in accordance with the derogation conditions described in table 2. For each substance group all derogation conditions shall be met for the specified hazard classifications. These derogations also apply to substances added to synthetic and man-made fibres during their manufacturing.

Table 2: Derogated hazard classifications by substance group

Substances that impart function to the final product			
Substance group	Derogated classifications	Derogation conditions	
Dyes and pigments	H301, H311, H331, H317, H334	Dust free dye formulations and/or automatic dosing and dispensing of dyes shall be used by dye houses to minimise worker exposure;	
	Reactive, direct, vat, sulphur dyes classified with H411, H412, H413	Dye houses using these classified dyes shall meet one of the following requirements: - Use of high affinity dyes - Use of solution dyeing - Use of colour matching instrumentation - Use of standard Operating Procedures for dyeing - Wastewater treatment to achieve colour removal (see criteria 16a).	
Flame retardants	H317, H373, H411, H412, H413	The product must be designed in order to meet ISO, EN, Member State or public sector procurement standards and regulations.	
7	H351 is derogated for antimony trioxide synergist on cotton, polyester and acrylic.	Emissions to air in the workplace where the flame retardant is applied to the textile product shall meet an eight hour occupational exposure limit value of 0.5 mg/m ³ .	

Optical	H411, H412, H413	Optical brighteners may only be		
brighteners		applied in the form of additives during the production of		
		polyamide, polyester and acrylic		
		fibres.		
		notes.		
Fabric	H317, H334	The concentration on the final		
softeners		product shall not exceed x.x%		
Water, dirt	H411, H412, H413	The function must be verified to be		
and stain		durable according to the test		
repellents		method and grading in criteria 24		
Other residua	Other residual substances that may be found on the final product			
Auxilliaries	H301, H311, H331,	Recipes shall be formulated using		
comprising:	EUH070, H371, H373,	automatic dosing systems and		
Carriers,	H317, H334, H411, H412	processes shall follow Standard		
Levelling	H413	Operating Procedures.		
agents,				
Dispersing	CO			
agents,	XV			
Thickeners,	X			
Binders,				
49				

Assessment and verification: The applicant shall obtain declarations of compliance from each dyeing, printing and finishing production site and, where necessary, their chemical suppliers, that the following types of substances, where used in production recipes and in the case they are not specifically derogated in table 2, do not meet the criteria for classification with one or more of the hazard classes and risk phrases listed in table 1:

- Dyes and pigments
- Auxilliary carriers, leveling agents and dispersing agents
- Optical brighteners (synthetic fibres only)
- Print thickeners, binders and plasticizers
- Cross-linking agents (from easy care finishes and printing)
- Flame retardants and synergists
- Water, dirt and stain repellents
- Fabric softeners

The following technical information shall be provided to support the declaration of non-classification:

- (i) For substances that have not been registered under Regulation (EC) No 1907/2006 and/or which do not yet have a harmonised CLP classification: Information meeting the requirements listed in Annex VII to that Regulation;
- (ii) For substances that have been registered under Regulation (EC) No 1907/2006 and which do not meet the requirements for CLP classification: Information based on the REACH registration dossier confirming the non-classified status of the substance;
- (iii) For substances that have a harmonised classification or are self-classified: safety data sheets where available. If these are not available or the substance is self-classified then information shall be provided relevant to the substances hazard classification according to Annex II to Regulation (EC) No 1907/2006;
- (iv) In the case of mixtures: safety data sheets where available. If these are not available then calculation of the mixture classification shall be provided according to the rules under Regulation (EC) No 1272/2008 together with information

relevant to the mixtures hazard classification according to Annex II to Regulation (EC) No 1907/2006.

Safety Data Sheets (SDS) shall be completed in accordance with the guidance in Section 10, 11 and 12 of Annex II of Regulation (EC) 1907/2006 (Requirements for the Compilation of Safety Data Sheets). Incomplete SDS will require supplementing by declarations from chemical suppliers.

Where substances used are derogated according to their hazard class in table 2 then the declaration shall specifically identify those derogated substances and provide supporting evidence showing how the derogation conditions are to be met.

15. Washing, drying and curing energy efficiency

The applicant shall demonstrate that all washing, drying and curing steps during the dyeing, printing and finishing of ecolabelled products incorporate a minimum number of BAT energy efficiency techniques as specified in table 3 and as listed in Annex 3.

Table 3: Washing, rinsing and drying energy efficiency techniques

BAT themes	Production volume	
$\langle C \rangle$	<10 tonnes/day	>10 tonnes/day
1. General energy management	Two techniques	Three techniques
2. Washing and rinsing processes	One technique	Two techniques
3. Drying and curing using stenter frames	One technique	Two techniques

Assessment and verification: The applicant shall compile declarations of compliance and supporting evidence from each dyeing, printing and finishing production sites with washing and/or drying steps. The evidence required shall include, as a minimum, site photographs, technical descriptions of each technique and evaluations of energy savings achieved. The applicant shall ensure that declarations and evidence are independently verified by site visits.

16. Treatment of emissions to air and water

(a) Wastewater discharges from wet processing

Wastewater discharges to the environment shall not exceed 20 g COD/kg textiles processing. This requirement shall apply to weaving, dyeing, printing and finishing processes used to manufacture the product(s). The requirement shall be measured downstream of on-site wastewater treatment plant and/or municipal wastewater treatment plant receiving wastewater from these processing sites.

If the effluent is treated on site and discharged directly to surface waters, it shall also meet the following requirements:

- (i) pH between 6 and 9 (unless the pH of the receiving water is outside this range)
- (ii) Temperature of less than 35°C (unless the temperature of the receiving water is above this value)

If colour removal is required then the following spectral absorption coefficients shall be met:

- (i) 436 nm (yellow sector) 7 m-1
- (ii) 525 nm (red sector) 5 m-1
- (iii) 620 nm (blue sector) 3 m-1

Where used in dyeing processes salt shall either be recycled or diluted so as to be less than xx mg/l in final discharges to the environment.

Assessment and verification: The applicant shall provide detailed documentation and test reports, using ISO 6060 and ISO 7887:2011 as relevant, and showing compliance with this criterion on the basis of monthly averages for the six months preceding the application, together with a declaration of compliance.

16.2 Emissions to air from printing and finishing processes

Total emissions of organic compounds, as defined in Council Directive 1999/13/EC, from production sites used to manufacture the ecolabelled product(s) shall not exceed 100 mg C/Nm³ from textile printing and for coating and drying processes combined.

Where textile coating and drying processes allow for the recovery and reuse of solvents an emissions limit of 150 mg C/Nm³ shall apply.

Assessment and verification: The applicant shall demonstrate compliance according to EN 12619:2013 or other equivalent standards. Monthly averages for the total emissions of organic compounds from production sites shall be provided for the six months preceding the application. Where recovery and reuse of solvents is carried out then monitoring data shall be provided to evidence the operation of these systems.

FITNESS FOR USE CRITERIA

The criteria in this section apply to intermediate fabric and knitted product and to the final product.

17. Dimensional changes during washing and drying

The dimensional changes after washing and drying at either domestic or industrial washing temperatures and conditions shall not exceed:

Textile products or type of material	Dimensional changes during washing and drying
for curtains and for furniture fabric that is washable and removable	+/- 2 %
knitted fabrics	+/- 4 %
Chunky knit	+/- 6 %
For bathroom linen, including terry towelling and fine rib fabrics	+/- 8 %
Interlock	+/- 5 %
Woven fabrics:	
Cotton and cotton mix	+/- 3 %
wool mix	+/- 2 %
synthetic fibres	+/- 2 %
Socks and hosiery	Check ISO 5077:2008
Non-woven	+/- 6 %

This criterion does not apply to:

- a) fibres or yarn,
- b) products clearly labelled "dry clean only" or equivalent,
- c) furniture fabrics that are not removable and washable.

Assessment and verification: The applicant shall provide test reports using the standards appropriate for the product.

For domestic washing EN ISO 6330:2012 in combination with EN ISO 5077:2008 shall be used as follows: 3 washes at temperatures as indicated on the product, with tumble drying after each washing cycle.

For commercial washing in industrial laundries ISO 15797 in combination with EN ISO 5077:2008 shall be used at a minimum of 75 °C or as indicated in the standard for the fibre and bleaching combination. Drying shall be as indicated on the product.

18. Colour fastness to washing

The colour fastness to washing shall be at least level 3-4 for colour change and at least level 3-4 for staining.

This criterion does not apply to products labelled "dry clean only" or equivalent (in so far as it is normal practice for such products to be so labelled), to white products or products that are neither dyed nor printed, or to non-washable furniture fabrics.

Assessment and verification: For domestic washing the applicant shall provide test

Assessment and verification: For domestic washing the applicant shall provide test reports using the test method: ISO 105 C06 (single wash, at temperature as marked on the product, with perborate powder).

For commercial washing in industrial laundries ISO 15797 in combination with ISO 105 C06 shall be used at a minimum of 75 °C or as indicated in the standard for the fibre and bleaching combination.

19. Colour fastness to perspiration (acid, alkaline)

The colour fastness to perspiration (acid and alkaline) shall be at least level 3-4 (colour change and staining). A level of 3 is nevertheless allowed when fabrics are

both dark colored (standard depth > 1/1) and made of regenerated wool. This criterion does not apply to white products, to products that are neither dyed nor printed, to furniture fabrics, curtains or similar textiles intended for interior decoration.

Assessment and verification: The applicant shall provide test reports using the following test method: ISO 105 E04 (acid and alkaline, comparison with multi-fibre fabric).

20. Colour fastness to wet rubbing

The colour fastness to wet rubbing shall be at least level 2-3. A level of 2 is nevertheless allowed for indigo dyed denim.

This criterion does not apply to white products or products that are neither dyed nor printed.

Assessment and verification: The applicant shall provide test reports using the following test method: ISO 105 X12.

21. Colour fastness to dry rubbing

The colour fastness to dry rubbing shall be at least level 4. A level of 3-4 is nevertheless allowed for indigo dyed denim.

This criterion does not apply to white products or products that are neither dyed nor printed, or to curtains or similar textiles intended for interior decoration.

Assessment and verification: The applicant shall provide test reports using the following test method: ISO 105 X12.

22. Colour fastness to light

For fabrics intended for furniture, curtains or drapes, the colour fastness to light shall be at least level 5. For all other products the colour fastness to light shall be at least level 4.

A level of 4 is nevertheless allowed when fabrics intended for furniture, curtains or drapes are both light coloured (standard depth < 1/12) and made of more than 20% wool or other keratin fibres, or more than 20% linen or other bast fibres.

This requirement does not apply to mattress ticking, mattress protection or underwear.

Assessment and verification: The applicant shall provide test reports using the following test method: ISO 105 B02.

23. Fabric resistance to pilling and abrasion

Non-woven fabrics and knitted garments, accessories and blankets made of wool, wool blends and polyester (including fleece), shall resist pilling to rating of 3. Woven cotton fabrics used for garments shall resist pilling to a rating of 3 (Martindale method).

Assessment and verification: The applicant shall provide reports from tests carried out as appropriate to the substrate:

• Knitted products: ISO 12945-1 Pill box method

• Woven fabrics: ISO 12945-2 Martindale method

24. Durability of function

Finishes, treatments and additives that impart water, oil and stain repellency flame retardancy and easy care (also referred to as non-crease or permanent press) to the textile product shall be durable. For water, oil and stain repellents consumers should be provided with guidance on how to maintain the functionality of finishes where applied to the product.

Textile fibres, fabrics and membranes that lend the final product intrinsic functional properties are exempt from these requirements.

Assessment and verification: For products with intrinsic properties applicants shall provide test reports demonstrating comparable or improved performance compared alternatives which may be applied as finishes.

(a) Water, oil and stain repellent functions

Water repellents shall retain a functionality of 80 out of 90 after 20 domestic wash and tumble dry cycles at 40°C, or after 5 industrial wash cycles at a minimum of 75°C.

Oil repellents shall retain a functionality of 3.5 out of 4.0 after 20 domestic wash and tumble dry cycles at 40°C, or after 5 industrial wash cycles at a minimum of 75°C.

Stain repellents shall retain a functionality of 3.0 out of 5.0 after 20 domestic wash and tumble dry cycles at 40°C, or after 5 industrial wash cycles at a minimum of 75°C.

Assessment and verification: The applicant shall provide reports from tests carried out according to the following standards, as appropriate to the product:

For all products domestic wash cycles ISO 6330:2012 or industrial laundry cycles ISO 10528 in combination with:

- Water repellents: ISO 4920:2012

- Oil repellents: ISO 14419:2010

- Stain repellents: ISO 22958:2005

(b) Flame retardant functions

Washable products shall retain their functionality after 50 industrial wash and tumble dry cycles at a minimum of 75°C. Non-washable products shall retain their functionality after a soak test.

Assessment and verification: The applicant shall provide reports from tests carried out according to the following standards, as appropriate to the product:

For domestic wash cycles ISO 6330:2012 in combination with EN ISO 12138:1997 and industrial laundry cycles EN ISO 10528:1995. Where the textile is non-removable BS 5651:1989 or equivalent.

(c) Easy-care (also referred to as non-crease or permanent press)

Natural fibre products shall achieve an SA-3 fabric smoothness grade and blended natural and synthetic fibre products an SA-4 fabric smoothness grade after 10 domestic wash and tumble drying cycles at 40°C.

Assessment and verification: The applicant shall provide reports from tests carried out according to the ISO 7768 Test method for assessing the smoothness appearance of fabrics after washing.

CORPORATE SOCIAL RESPONSIBILITY CRITERIA

The criteria in this section apply to the cut/make/trim stages of production for textile products.

25. International Labour Organisation (ILO) Core Labour Standards

Applicants shall ensure that the fundamental principles and rights at work as specified in the International Labour Organisation's (ILO) Core Labour Standards shall be observed by all cut/make/trim production sites used to manufacture the licensed product(s). The ILO Core Standards that shall apply are:

- 029 Forced Labour
- 087 Freedom of Association and Protection of the Right to Organise
- 098 Right to Organise and Collective Bargaining
- 100 Equal remuneration
- 105 Abolition of Forced Labour
- 111 Discrimination (Employment and Occupation)
- 155 Occupational safety and health
- 138 Minimum Age Convention
- 182 Elimination of the Worst Forms of Child Labour

These standards should be communicated to cut/make/trim production sites used to manufacture the final product.

Assessment and verification: The applicant shall demonstrate third party verification of compliance, to include site visits, for all cut/make/trim production sites in the supply chain for their licensed products. This shall take place upon application and subsequently during the license period if new production sites are introduced.

A license may be suspended or revoked if substantive evidence is received by Competent Bodies that the fundamental principles of the ILO Core Labour Standards have been breached.

26. Restriction on the sandblasting of denim

The use of manual and mechanical sandblasting to achieve distressed denim finishes shall not be permitted.

Assessment and verification: The applicant shall provide details of all production sites used to produce ecolabelled denim products together with documentary and photographic evidence of the alternative processes used.

27. Information appearing on the Ecolabel

Box 2 of the Ecolabel may contain the following text:

- (i) More sustainable fibre production (or as selected from table 4 below)
- (ii) Less polluting production processes
- (iii) Restrictions on hazardous substances
- (iv) Tested for durability

Table 4: Text that may appear alongside the Ecolabel depending on product content

Fibres used	Production specification	Text that may be displayed
Cotton fibres	Organic content of more than 50%	Made with xx% organic cotton
	Organic content of more than 95%	Made with organic cotton
	IPM content of more than 70%	Cotton grown with reduced pesticides
Man-made cellulose fibres	Certified sustainable pulp of more than 25%	Made using xx% wood from sustainable forests
	Certified sustainable pulp of more than 95%	Made using wood from sustainable forests
Polyamide	Recycled content of more than 20%	Made with xx% recycled nylon
	Recycled content of more than 95%	Made with recycled nylon
Polyester	Recycled content of more than 50%	Made with xx% recycled polyester
	Recycled content of more than 95%	Made with recycled polyester

Assessment and verification: The applicant shall provide a sample of the product packaging showing the label, together with a declaration of compliance with this criterion.

Textile Restricted Substance List (RSL)

The EU Ecolabel RSL consists of restrictions that apply to the following production stages in the textile supply chain:

- (a) Fibre and yarn spinning
- (b) Bleaching and pre-treatment
- (c) Dye houses
- (d) Printing processes
- (e) Finishing processes

A number of restrictions also apply to the final product, for which analytical testing may be required.

1. Restrictions applying to fibre and yarn spinning

Substance group	Scope of restriction	Limit values	Verification requirements
(a) Sizeing preparations applied to fibres and yarns Applicability: Primary spinning	At least 95% (by dry weight) of the component substances shall be readily biodegradable. In all cases the sum of each component shall be taken into account.	70% degradation within 28 days	Verification: Declaration from the chemical supplier supported by OECD or ISO test results Test method: OECD 301 A, OECD 301 E, ISO 7827, OECD 302 A, ISO 9887, OECD 302 B, ISO 9888

(b) Spinning	At least 90% (by dry weight) of the component	Readily	Verification:
solution additives,	substances shall be readily biodegradable or inherently	biodegradable:	Declaration from
spinning additives	biodegradable and eliminable in waste water treatment	70%	chemical supplier
and preparation	plants.	degradation	supported by
agents for primary	In all cases the sum of each component shall be taken	within 28 days	OECD or ISO test
spinning	into account.	Inherently	results
(including carding		biodegradable:	Test method:
oils, spin finishes		60%	See above for
and lubricants)		biodegradable	readily
Applicability:		within 28 days	biodegradable
Primary spinning		K	tests. Inherently
		7	biodegradable
	A X		tests that are
			accepted:
			OECD 301 B,
			ISO 9439,
			OECD 301 C,
			OECD 302 C,
			OECD 301 D,
			ISO 10707,
			OECD 301 F,
			ISO 9408,
	C(J)		ISO 10708
			ISO 14593

2. Restrictions applying to bleaching

Substance group	Scope of restriction	Limit values	Verification requirements
(a) Bleaching of yarns, fabrics and end productsApplicability:All fibre types	Chlorine agents shall not be used for the bleaching of any yarns, fabrics, knitted panels or end-products with the exception of man-made cellulose fibres.	n/a	Verification: Declaration of non-use by production stage(s)

3. Restrictions applying to dye houses

Substance group	Scope of restriction	Limit values	Verification requirements
(a) Halogenated carriers Applicability: Polyester, acrylic, polyamide	Halogenated dyeing accelerants (carriers) shall not be used to dye polyester fibres and fabrics containing polyester. Examples of carriers include1,2-dichlorobenzene, 1,2,4-trichlorobenzene, chlorophenoxyethanol.	n/a	Verification: Declaration from the chemical supplier supported by SDS.
(b) Azo dyes Applicability: Yellow, orange and red shades on acrylic, cotton, polyamide, wool fibres	Azo dyes shall not be used that may cleave to aromatic amines that are known to be carcinogenic. Annex x contains a list of restricted aryl amines and an indicative list of azo dyes that may cleave to these aryl amines. This should be used a guide to dyes that should not be used. The limit value for aryl amines shall be applied to the final product.	30 mg/kg for each amine ¹	Verification: Final product testing to be carried out as specified. Test method: EN 14362-1:2012 and 3:2012 See also note 1
(c) CMR dyes Applicability: All products.	Dyes shall not be used that are carcinogenic, mutagenic or toxic to reproduction. Annex x contains a listing of CMR dyes that shall not be used. The limit value for dyes shall be applied to the final product.	n/a	Verification: Declaration from the chemical supplier supported by SDS.
(d) Potentially sensitising dyes Applicability: - polyester, - acrylic, -	Dyes shall not be used that are potentially sensitising. Annex x contains a listing of sensitising dyes that shall not be used. The limit value for dyes shall be applied to the final product.		Verification: Declaration from the chemical supplier supported by SDS.

polyamide Elasticated or stretchable skin contact garments or underwear			
(e) Chrome mordant dyes Applicability: Wool, polyamide	Chrome mordant dyes shall not be used. Verification may be required for wool products if SDS information is inadequate. The following limit of detection value is to be used if verification is required.	n/a	Verification: Declaration from the chemical supplier supported by SDS.
(f) Metal complex dyes . Applicability: Polyamide, wool, cellulose fibres	Metal complex dyes based on copper, chrome and nickel shall only be permitted for dyeing: - wool fibres - polyamide fibres - blends with man-made cellulose fibres.	<mark>n/a</mark>	Verification: Declaration from the chemical supplier supported by SDS.

Notes:

1. False positives may be possible with respect to the presence of 4-aminoazobenzene, and confirmation is therefore recommended

4. Restrictions applying to printing processes

Printing			
(a) Printing pastesApplicability:Where printing is applied	Printing pastes used shall not contain more than 5% Volatile Organic Compounds (VOC's). These may include: - aliphatic hydrocarbons (C10 - C20) - monomers such as acrylates, vinyl acetates, styrene	<5% w/w VOC content	Verification: Declaration from applicant that no printing has been made or Declaration from printer supported

	- monomers such as acrylonitrile,		by SDS for the
	acrylamide,butadiene		printing paste.
	- alcohols, esters, polyols		
	- formaldehyde		
	- phosphoric acid esters		
	- benzene as impurity from upper hydrocarbons		
	- ammonia (e.g., urea decomposition, biuret		
	reaction)		
(b) Plastisol	'Plastisol' additives to print binders, including PVC and	n/a	Verification:
binders	restricted phthalates, shall not be used.		Declaration from
Applicability:	AX		applicant that no
Where printing is			printing has been
applied			made or
			Declaration from
			chemical
			suppliers
			supported by SDS
			for additives.
	A		

5. Restrictions applying to finishing processes

Functional finishes, treatments and additives

(a) Biocide finishes used to impart biocidal properties to the final products. Applicability: All products	Biocides shall not be incorporated into the final product in order to impart biocidal properties. Common examples include triclosan, nano-silver, zinc organic compounds, tin organic compounds, dichlorophenyl(ester) compounds, benzimidazol derivatives and isothiazolinones.	n/a	Verification: Declaration of non-use from the applicant
(b) Anti-felting and shrink resistance Applicability: Where applied.	Halogenated substances or preparations shall only be applied to wool slivers and loose scoured wool.	n/a	Verification: Declaration of non-use from wool processors.
(c) Water, stain and oil repellent treatments Applicability: Where applied.	Perfluorinated water, stain and oil repellents shall only be permitted for use on synthetic fabrics and where the function is required to be durable. C4 perfluoroalkyl sulfonates and C6 perfluorocarboxylic acids (fluorotelomers) are permitted for use in ecolabelled products.	See PFAS and PFCA limit values below	See PFAS and PFCA verification below
	Long chain (≥C5) perfluoroalkyl sulfonate (PFAS) substances shall not be used. <i>The following trace limits apply:</i> PFOS (perflourooctane sulfonate and its derivatives) All other PFAS forms (≥C5)	1.0 μg/m ² of the coated material. 20.0 μg/kg	Verification: Declaration of non-use supported by SDS to be provided by finishers. Test method: Solvent extraction followed by GC-MS-MS or HPLC-MS-MS
	Long chain (≥C7) perfluorocarboxylic acids shall not be used. The following trace limits apply to residues of		Verification:

	perfluorocarboxylic acid and salts (PFCA):		Final product
	Perfluorobutanoic acid (PFBA) (375-22-4)	PFOA and each	testing
	Perfluorohexanoic acid (PFHxA) (307-24-4)	PFCA 0.05	Test method:
	Perfluorooctanoic acid (PFOA) (335-67-1)	mg/kg	Solvent extraction
	Perfluorononanoic acid (PFNA) (375-95-5)	Sum total 0.1	followed by
		mg/kg	GC-MS-MS or
			HPLC-MS-MS
(d) Flame	The following flame retardants shall not be used:	n/a	Verification:
retardants	HBCDD – Hexabromocyclododecane		Declaration of
Applicability:	PeBDE – Pentabromodiphenyl ether		non-use and/or
Where applied and	OcBDE – Octabromidiphenyl ether	0	need supported by SDS
as specified for synergists.	DecaBDE – Decabromodiphenyl ether		
	PBBs – Polybrominated biphenyls		
	TEPA – Tris(aziridinyl) phosphinoxide		
	TRIS – Tris (2,3 dibromopropyl) phosphate		
	TCEP – Tris (2,chloroethyl)phosphate		
	Paraffin, C10-C13, chlorinated (SCCP)		
	80		
C	The synergist antimony trioxide (H351) is derogated for	Eight hour mean	Verification:
×	use as a synergist on cotton, polyester and acrylic	shift value ELV	Monitoring data is
	fabrics under the condition that workplace occupational	for 0.5 mg/m ³	to be provided by
	exposure limit values are met.		the finisher where
\) ⁷			the treatment is
			applied.

1.6 Restrictions applying to all production stages

Substances of	Very High Concern (SVHC's)		
(a)	SVHC's that appear on the ECHA Candidate List that is	0.1% w/w	Verification:

	current at the time of application shall not be present in the	Declaration of
that have	final product unless a derogation has been approved.	compliance by
onto the	The current Candidate List can be consulted at:	each production stage and their
ЕСНА	http://echa.europa.eu/web/guest/candidate-list-table	chemical
Candidate List. Applicability: All products.	No derogation from the exclusion in this criterion shall be given concerning substances identified as SVHC's and which have been entered onto the list foreseen in Article 59 of Regulation (EC) No 1907/2006, and which are present in the article or in any homogenous part of it in concentrations of more than 0.1%.	suppliers.
ouriaciants, l	abric softeners and complexing agents	

		1	I
(c) Non-ionic	All non-ionic and cationic surfactants must also be readily		Verification:
and cationic	biodegradable under anaerobic conditions		Declaration from
Surfactants	Where a substance is listed in the Detergents Ingredients		SDS and/or
Applicability:	Database then this shall provide the reference point for		chemical supplier
All wet	biodegradability:		supported by
processes	http://ec.europa.eu/environment/ecolabel/documents/did_list/		OECD or ISO tes
	didlist_part_a_en.pdf		results
	·		Test method:
			EN ISO 11734,
			ECETOC No 28
		K	(June 1988),
			OECD 311
	AX		
(d)	Long chain perfluoroalkyl sulfonates (≥C5) and	7	Verification:
Fluorinated	perfluorocarboxylic acids (≥C7) shall not be used in the		Declaration from
surfactants	production processes for ecolabelled products.		SDS and/or
Applicability:			chemical supplier
All wet			
processes			
Auxilliaries			
(e)	The following substances shall not be used in any textile		Verification:
Auxilliaries	preparations or formulations and are subject to limit values		Final product
used in	for the presence of substances on the final product:		testing is to be
preparations	Nonylphenol, mixed isomers 25154-52-3		carried out as
and		50 mg/kg sum	specified for
formulations.	4-Nonylphenol 104-40-5	total	alkyphenols.
Applicability:	4-Nonylphenol, branched 84852-15-3		Test method:
All products.	Octylphenol 27193-28-8		
ran products.	4-Octylphenol 1806-26-4		Solvent extraction
			followed by
	4-tert-Octylphenol 140-66-9		LCMS
	Alkylphenolethoxylates (APEOs) and their derivatives:		
	Polyoxyethylated octyl phenol 9002-93-1		
	Polyoxyethylated nonyl phenol 9016-45-9		
	1 oryoxyearymed nonyr phenor 2010-43-2		

Polyoxyethylated p-nonyl phenol 26027-38-3		
The following substances shall not be used in any textile preparations or formulations: bis(hydrogenated tallow alkyl) dimethyl ammonium	100 mg/kg for each substance	Verification: Declaration from the chemical
chloride (DTDMAC) distearyl dimethyl ammonium chloride (DSDMAC) di(hardened tallow) dimethyl ammonium chloride	: 0	suppliers supported by SDS for all production stages.
(DHTDMAC) ethylene diamine tetra acetate (EDTA), diethylene triamine penta acetate (DTPA)		suges.
4-(1,1,3,3-tetramethylbutyl)phenol 1-Methyl-2-pyrrolidone		
Nitrilotriacetic acid (NTA)		

1.7 Restrictions applying to the final product

(a) Candidate List	N,N-Dimethylacetamide (127-19-5)		Verification:
SVHC's that are derogated.	The following limit values apply to end products containing elastane and acrylic:		Final product testing
Applicability: Elastane, acrylic	Products for babies and children under 3 years old	0.001% w/w	Test method:
	Products that are in direct contact with the skin Garments with limited skin contact and interior textiles	0.005% w/w 0.005% w/w	Solvent extraction, GCMS or LCMS

(b) Easy care (also referred to as noncrease or permanent press) Applicability: Garments in skin contact	The following limit values apply to residual formaldehyde from easy care finishes: Products for babies and children under 3 years old. Products that are in direct contact with the skin Garments with limited skin contact and interior textiles	16 ppm 16 ppm 75 ppm	Verification: Final product testing for formaldehyde Test method: EN ISO 14184-1
(c) Biocides used to protect textiles during transportation and storage. Applicability: Natural fibres	Only biocides that are authorised under Biocide Directive 98/8/EC and Biocide Regulation (EC) No 528/2012 are permited for use. Applicants should consult the most current authorisation list: http://ec.europa.eu/environment/biocides/annexi_and_ia .htm The following specific biocides are restricted with a sum limit value or specific limit values applying if additional verification is required: Chlorophenols (their salts and esters) Polychlorinated biphenyls (PCB) Organotin compounds, including TBT, TPhT, DBT and DOT Dimethyl fumarate (DMFu)		Verification: Declaration of non-use from before shipping and storage supported by SDS.
(d) Extractable metals Applicability: All products.	The following limit values apply to products intended for babies and children under 3 years old: Antimony (Sb) Arsenic (As) Cadmium (Cd) Chromium (Cr)	All mg/kg 30.0 0.2 0.1	Verification: Final product testing Test method: Extraction - EN ISO 105-E04- 2013 (Acid sweat
	Textiles dyed with metal complex dyesAll other textiles	1.0 0.5	solution) Detection – ICP-

	Cobalt (Co)	1.0	MS or ICP-OES
	Copper (Cu)	25.0	
	Lead (Pb)	0.2	
	Nickel (Ni)		
	- Textiles dyed with metal complex dyes	1.0	
	- All other textiles	0.5	
	Mercury (Hg)	0.02	
	The following limit values apply to all other products	LAU	
	including interior textiles:	All mg/kg	Verification:
	Antimony (Sb)	30.0	Final product
	Arsenic (As)	1.0	testing
	Cadmium (Cd)	0.1	Test method:
	Chromium (Cr)		Extraction - DIN
	- Textiles dyed with metal complex dyes	2.0	EN ISO 105-E04-
	- All other textiles		2009 (Acid sweat solution)
	Cobalt (Co)	1.0	Detection – GC-
	- Textiles dyed with metal complex dyes		ICP-MS
		4.0	
	- All other textiles	1.0	
	Copper (Cu)	50.0	
×	Lead (Pb)	1.0	
-0	Nickel (Ni)	1.0	
	Mercury (Hg)	0.02	
(e) Coatings,	Polymers should not contain the following phthalates:	Sum total	Verification:
laminates and	DEHP (Bis-(2-ethylhexyl)-phthalate)	0.1% w/w	Declaration by
membranes	BBP (Butylbenzylphthalate)		polymer
Applicability:			manufacturer
Where	DBP (Dibutylphthalate)		supported by SDS
incorporated into	DMEP (Bis2-methoxyethyl) phthalate		for the polymer
textile structure	DIBP (Diisobutylphthalat)		formulation.
	DIHP (Di-C6-8-branched alkyphthalates)		Test method:

	DHNUP (Di-C7-11-branched alkylphthalates)		EN ISO 14389
	DHP (Di-n-hexylphthalate)		
	Fluoropolymer membranes and laminates shall not contain PFOA or PFNA:		Verification:
		PFOA and	Final product
	Perfluorooctanoic acid (PFOA) (335-67-1)	PFNA each 0.05 mg/kg	testing
	Perfluorononanoic acid (PFNA) (375-95-5)	nig/kg	Test method:
		:40	Solvent extraction GC-MS or HPLC- MS LCMS
(f) Accessories	For metal accessories:		Verification:
such as buttons,	A migration limit shall apply to nickel-containing metal	Nickel 0.5	Testing of the
rivets and zips	alloys that are in direct and prolonged contact with the	μg/cm ² /week	composition of
Applicability:	skin.		the metal
Where	Additionally testing shall be carried out for the presence		components.
incorporated into	of the following metals, to which the following limit		Test methods:
garment structure	values shall apply:	00 1	For nickel
	Lead (Pb),	90 mg/kg	migration
	Cadmium (Cd)		EN 12472-2005
	- products intended for babies and children under 3	50 mg/kg	EN 1811-
	years old:		1998+A1-2008
C	- all other products including interior textiles:	100 mg/kg	For other metals
×	Chrome (Cr) where there is chrome plating	60 mg/kg	Detection – GC-
~20	Mercury (Hb)	60 mg/kg	ICP-MS
V)	The following phthalates shall not be used in any plastic	n/a	Verification:
7	accessories:		SDS is to be
	- DEHP (Bis-(2-ethylhexyl)-phthalate)		provided for the
	- BBP (Butylbenzylphthalate)		plastic
	- DBP (Dibutylphthalate)		formulation.
	, , , , , , , , , , , , , , , , , , ,		
	- DMEP (Bis2-methoxyethyl) phthalate		
	- DIBP (Diisobutylphthalate)		

- DIHP (Di-C6-8-branched alkyphthalates)
- DHNUP (Di-C7-11-branched alkylphthalates)
- DHP (Di-n-hexylphthalate)

The following phthalates shall not be used in children's clothing where there is a risk that the accessory may be placed in the mouth e.g. zip handle

- DINP (Di-isononyl phthalate)
- DIDP (Di-isodecyl phthalate)

Textile Restricted Substance List (RSL): Dye restrictions

(a) Aromatic amines that are restricted by REACH Annex XVII

Aryl amine	CAS Number
4-aminodiphenyl	92-67-1
Benzidine	92-87-5
4-chloro-o-toluidine	95-69-2
2-naphtylamine	91-59-8
o-amino-azotoluene	97-56-3
2-amino-4-nitrotoluene	99-55-8
4-chloroaniline	106-47-8
2,4-diaminoanisol	615-05-4
4,4'-diaminodiphenylmethane	101-77-9
3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0
p-cresidine	120-71-8
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1

o-toluidine	95-53-4
2,4-diaminotoluene	95-80-7
2,4,5-trimethylaniline	137-17-7
4-aminoazobenzene	60-09-3
o-anisidine	90-04-0

$\begin{tabular}{ll} \textbf{(b)} & \textbf{Aromatic amines that are restricted in some EU Member States} \\ \end{tabular}$

2,4-Xylidine	95-68-1
	A
2,6-Xylidine	87-62-7

(c) Dyes that may cleave to aromatic amines

Disperse dyes that may cleave to aromatic amines		
Disperse Orange 60	Disperse Yellow 7	
Disperse Orange 149	Disperse Yellow 23	
Disperse Red 151	Disperse Yellow 56	
Disperse Red 221	Disperse Yellow 218	

Basic dyes that may cleave to aromatic amines		
Basic Brown 4	Basic Red 114	
Basic Red 42	Basic Yellow 82	
Basic Red 76	Basic Yellow 103	
Basic Red 111		

Acid dyes that may cleave to aromatic amines			
CI Acid Black 29	CI Acid Red 24	CI Acid Red 128	
CI Acid Black 94	CI Acid Red 26	CI Acid Red 115	
CI Acid Black 131	CI Acid Red 26:1	CI Acid Red 128	
CI Acid Black 132	CI Acid Red 26:2	CI Acid Red 135	
CI Acid Black 209	CI Acid Red 35	CI Acid Red 148	
CI Acid Black 232	CI Acid Red 48	CI Acid Red 150	
CI Acid Brown 415	CI Acid Red 73	CI Acid Red 158	
CI Acid Orange 17	CI Acid Red 85	CI Acid Red 167	
CI Acid Orange 24	CI Acid Red 104	CI Acid Red 170	
CI Acid Orange 45	CI Acid Red 114	CI Acid Red 264	
CI Acid Red 4	CI Acid Red 115	CI Acid Red 265	
CI Acid Red 5	CI Acid Red 116	CI Acid Red 420	
CI Acid Red 8	CI Acid Red 119:1	CI Acid Violet 12	

Direct dyes that may cleave to aromatic amines		
Direct Black 4	Basic Brown 4	Direct Red 13
Direct Black 29	Direct Brown 6	Direct Red 17
Direct Black 38	Direct Brown 25	Direct Red 21
Direct Black 154	Direct Brown 27	Direct Red 24
Direct Blue 1	Direct Brown 31	Direct Red 26
Direct Blue 2	Direct Brown 33	Direct Red 22
Direct Blue 3	Direct Brown 51	Direct Red 28

Direct Blue 6	Direct Brown 59	Direct Red 37
Direct Blue 8	Direct Brown 74	Direct Red 39
Direct Blue 9	Direct Brown 79	Direct Red 44
Direct Blue 10	Direct Brown 95	Direct Red 46
Direct Blue 14	Direct Brown 101	Direct Red 62
Direct Blue 15	Direct Brown 154	Direct Red 67
Direct Blue 21	Direct Brown 222	Direct Red 72
Direct Blue 22	Direct Brown 223	Direct Red 126
Direct Blue 25	Direct Green 1	Direct Red 168
Direct Blue 35	Direct Green 6	Direct Red 216
Direct Blue 76	Direct Green 8	Direct Red 264
Direct Blue 116	Direct Green 8.1	Direct Violet 1
Direct Blue 151	Direct Green 85	Direct Violet 4
Direct Blue 160	Direct Orange 1	Direct Violet 12
Direct Blue 173	Direct Orange 6	Direct Violet 13
Direct Blue 192	Direct Orange 7	Direct Violet 14
Direct Blue 201	Direct Orange 8	Direct Violet 21
Direct Blue 215	Direct Orange 10	Direct Violet 22
Direct Blue 295	Direct Orange 108	Direct Yellow 1
Direct Blue 306	Direct Red 1	Direct Yellow 24
Direct Brown 1	Direct Red 2	Direct Yellow 48
Direct Brown 1:2	Direct Red 7	
Direct Brown 2	Direct Red 10	

(d) Dyes that are CMR or which potentially be sensitising

Dyes that are carcinogenic, mutagenic or toxic to reproduction		
C.I. Acid Red 26	C. I. Direct Black 38	C.I. Disperse Blue 1
C.I. Basic Red 9	C. I. Direct Blue 6	C.I. Disperse Orange 11
C.I. Basic Violet 14	C. I. Direct Red 28	C. I. Disperse Yellow 3

Disperse dyes that are potentially sensitising		
C.I. Disperse Blue 1	C.I. Disperse Blue 124	C.I. Disperse Red 11
C.I. Disperse Blue 3	C.I. Disperse Brown 1	C.I. Disperse Red 17
C.I. Disperse Blue 7	C.I. Disperse Orange 1	C.I. Disperse Yellow 1
C.I. Disperse Blue 26	C.I. Disperse Orange 3	C.I. Disperse Yellow 3
C.I. Disperse Blue 35	C.I. Disperse Orange 37	C.I. Disperse Yellow 9
C.I. Disperse Blue 102	C.I. Disperse Orange 76	C.I. Disperse Yellow 39
C.I. Disperse Blue 106	C.I. Disperse Red 1	C.I. Disperse Yellow 49

Textile BAT washing, drying and curing energy efficiency measures

BAT theme	BAT techniques	
1. General energy	1.1 Sub-metering,	
management	1.2 Process monitoring and automatic control systems for	
	flow control, filling volumes, temperatures and timing;	
	1.3 Insulation of pipework, valves and flanges	
	1.4 Frequency controlled electric motors and pumps	
	1.5 Closed design of machines to reduce vapour loss	
	1.6 Water and liquor re-use/recycling in batch processes	
	1.7 Heat recovery e.g. rinse water, steam condensate,	
	process exhaust air, combustion gases	
2. Washing and rinsing	2.1 Use of cooling water as process water	
process	2.2 Replacement of overflow washing with drainage/inflow	
	washing	
X	2.3 Use of 'smart' rinsing technologies with water flow	
CK	controls and counter currents	
X	2.4 Installation of heat exchangers	
3. Drying and curing	3.1 Optimisation of air flow	
using stenter frames	3.2 Insulation of enclosures	
\ 	3.3 Installation of Efficient burner systems	
	3.4 Installation of heat recovery systems	